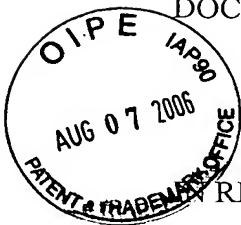


DPW

DOCKET NO.: 246437US79



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RE APPLICATION OF:

Stephen D. BJORGAN, et al.

SERIAL NO: 10/748,146

GROUP: 2173

FILED: December 31, 2003

EXAMINER:

FOR: DYNAMICALLY MODIFIABLE KEYBOARD-STYLE INTERFACE

LETTER

Mail Stop DD
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Submitted herewith are an International Preliminary Report on Patentability and a Written Opinion for the Examiner's consideration. The reference(s) cited therein have been previously filed on April 10, 2006.

Respectfully Submitted,

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From the INTERNATIONAL BUREAU

PCTNOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)

(PCT Rule 44bis.1(c))

To:

ARRIVÉ COURRIER

Le 18 JUIL. 2006

DIOU, Jean-Marc
France Telecom
R & D/PIV/PI
38-40, rue du Général Leclerc
F-92794 Issy Moulineaux Cedex 9
FRANCE

Date of mailing (day/month/year)

13 July 2006 (13.07.2006)

Applicant's or agent's file reference

05010

IMPORTANT NOTICE

International application No.

PCT/EP2004/014334

International filing date (day/month/year)

16 December 2004 (16.12.2004)

Priority date (day/month/year)

31 December 2003 (31.12.2003)

Applicant

FRANCE TELECOM

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Agnes Wittmann-Regis

Facsimile No. +41 22 338 82 70

e-mail: pi06@wipo.int

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 05010	FOR FURTHER ACTION		See item 4 below
International application No. PCT/EP2004/014334	International filing date (<i>day/month/year</i>) 16 December 2004 (16.12.2004)	Priority date (<i>day/month/year</i>) 31 December 2003 (31.12.2003)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant FRANCE TELECOM			

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

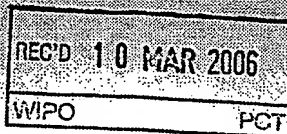
3. This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input checked="" type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Date of issuance of this report 03 July 2006 (03.07.2006)
Facsimile No. +41 22 338 82 70 Form PCT/IB/373 (January 2004)	Authorized officer Agnes Wittmann-Regis e-mail: pt06@wipo.int

PATENT COOPERATION TREATY



From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2004/014334

International filing date (day/month/year)
16.12.2004

Priority date (day/month/year)
31.12.2003

International Patent Classification (IPC) or both national classification and IPC
G06F3/033

Applicant
FRANCE TELECOM

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office
D-80298 Munich
Tel. +49 89 23399 - 0 Tx: 523656 epmu d
Fax: +49 89 23399 - 4465

Authorized Officer

Fournier, N

Telephone No. +49 89 23399-8249



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2004/014334

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2004/014334

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1-5
Inventive step (IS)	Yes: Claims	
	No: Claims	1-5
Industrial applicability (IA)	Yes: Claims	1-5
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/EP2004/014334

Reference is made to the following documents

- filed on 4/10/06*
- D1:** US 2003/174125 A1 (TORUNOGLU ILHAMI ET AL) 18 September 2003 (2003-09-18)
D2: WO 01/93182 A (VKB INC; LIEBERMAN, KLONY; SHARON, YUVAL; NAIMI, EYAL; MAOR, YANIV; TS) 6 December 2001 (2001-12-06)
D3: WO 02/057089 A (CLEAR TECHNOLOGIES, INC) 25 July 2002 (2002-07-25)
D4: US 2003/128188 A1 (WILBRINK TIJS ET AL) 10 July 2003 (2003-07-10)

ITEM V (Novelty and Inventive Step)

1 INDEPENDENT CLAIM 1

1.1 The subject-matter of claim 1 of the present application does not meet the requirements of Article 33(1)(2) PCT for the following reasons.

1.2 Document **D1** discloses the subject-matter of claim 1 as follows:

"A dynamically configurable user-input interface for interacting with a user, comprising:

- a projection unit for projecting (1) a first virtual interface including at least one of a virtual keyboard, a virtual mousepad and at least one virtual mouse button and (2) a second virtual interface including at least one of a virtual keyboard, a virtual mousepad and at least one virtual mouse button to be displayed in place of at least a portion of said first virtual interface (**D1**, [0023]-[0024], [0085], Fig 7: *the system projects an input guide according to the current input mode; two possible modes are the keyboard mode and the mouse mode; these may be displayed in the same position on the display surface, either alterningly or simultaneously*);
- a motion sensor for determining a position on the first and second virtual interfaces that is interacted with by a user (**D1**, [0022]: *the system detects the position of the user's fingers*);
- a communications controller for communicating the position on the first and second virtual interfaces outside of the user-input interface (**D1**, [0044]: *the user-input is communicated, e.g. by a USB wired port or wirelessly via a Bluetooth port, to other devices*); and
- a controller for controlling the projection unit to switch from the first virtual interface to the second virtual interface (**D1**, [0023]: *the system switches between the interfaces, either automatically, or when the user specifies a switch command - thus the interface is dynamically configurable*)."

- 1.3 Similarly, document **D2** discloses the subject-matter of claim **1** as follows:
"A dynamically configurable user-input interface for interacting with a user, comprising:
- a projection unit for projecting (1) a first virtual interface including at least one of a virtual keyboard, a virtual mousepad and at least one virtual mouse button and (2) a second virtual interface including at least one of a virtual keyboard, a virtual mousepad and at least one virtual mouse button to be displayed in place of at least a portion of said first virtual interface (**D2**, page 1, line 28-page 2, line 3, page 4, lines 20-24: *two different key layouts for two different languages are projected on the same keys of a virtual keyboard*);
- a motion sensor for determining a position on the first and second virtual interfaces that is interacted with by a user (**D2**, page 2, lines 4-7);
- a communications controller for communicating the position on the first and second virtual interfaces outside of the user-input interface (**D2**, page 2, lines 7-8);
and
- a controller for controlling the projection unit to switch from the first virtual interface to the second virtual interface (**D2**, page 4, lines 20-24, page 16, line 32-page 17, line 18: *the system switches between the interfaces*)."

2 DEPENDENT CLAIMS 2-5

- 2.1 The subject-matter of claims **2-5** of the present application does not meet the requirements of Article 33(1)-(3) PCT for the following reasons.
- 2.2 Document **D1** discloses or renders obvious the subject-matter of claims **2-5** as follows:
- 2.2.1 Claim **2**: directed towards comprising keyboards for two different languages (**D1**, [0046], [0061]: *the system provides a QWERTY keyboard [0046]; moreover the input guide can take any form deemed appropriate by the skilled person - this may for example be a numeric keyboard [0061]; thus it would be obvious to the skilled person to implement a second keyboard interface with a different key layout according to the circumstances, e.g. for a different language such as the binary computer language that uses 0 and 1 or any other written language, without the use of any inventive skill*).
- 2.2.2 Claim **3** and **4**: directed towards the virtual interfaces comprising a mousepad, possibly with mouse buttons, and a keyboard (**D1**, [0023], [0046], [0085]).
- 2.2.3 Claim **5**: directed towards comprising a telephone interface (**D1**, [0017],

[0042], [0046], [0061], Fig 1: *the system provides a phone button - see Fig 1, top row of the virtual keyboard, third button from the left - and is designed to be used as an interface to a telephone - see [0042]; moreover the input guide can take any form deemed appropriate by the skilled person, such as a numeric keyboard - see [0046], [0061]; thus it would be obvious to the skilled person to implement a phone interface to interact with a telephone according to the circumstances, without the use of any inventive skill*).

2.3 Document **D2** discloses or renders obvious the subject-matter of claims 2 and 5 as follows:

2.3.1 Claim 2: directed towards comprising keyboards for two different languages (**D2**, page 4, lines 20-24, page 16, line 32-page 17, line 18).

2.3.2 Claim 3 and 4: directed towards the virtual interfaces comprising a mousepad, possibly with mouse buttons, and a keyboard (**D2**, page 1, line 28-page 2, line 3, page 4, lines 20-24: *the possibility of displaying a virtual keyboards or a virtual mouse with mouse button is disclosed; also the switching between two different keyboard layouts is disclosed; it would be obvious to the person skilled in the art, to modify the system in such a manner that the switching is between a keyboard and a mouse, with or without mouse buttons, as deemed suitable according to the circumstances, without use of any inventive skill*).

2.3.3 Claim 5: directed towards comprising a telephone interface (**D2**, page 2, line 3).

COMMENTS

3 It is not at present apparent which part of the application could serve as a basis for a new claim meeting the requirements of Article 33(1) PCT.

ITEM VII (Form and Content)

4 The independent claims are not in the two-part form with respect to the closest prior art **D1**, and do therefore not meet the requirements of Rule 6.3 (b) PCT.

5 The features of the claims are not provided with reference signs placed in parentheses, and do therefore not meet the requirements of Rule 6.2(b) PCT.

6 The relevant prior art documents **D1-D4** are not identified in the description. The application does therefore not meet the requirements of Rule 5.1 (a)(ii) PCT.